

MISSOURI DEPARTMENT OF NATURAL RESOURCES

Michael L. Parson
Governor

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Director

May 2, 2024

FINANCIAL ASSISTANCE CENTER FINDING OF NO SIGNIFICANT IMPACT/ENVIRONMENTAL ASSESSMENT

TO: ALL INTERESTED GOVERNMENT AGENCIES AND PUBLIC GROUPS

In accordance with procedures for environmental review found at 10 CSR 20-4.050, the department has performed our review on the proposed action below:

PROJECT INFORMATION:

Project Identification: Metropolitan Golf Course - Normandie

Applicant: Metropolitan Golf Foundation Project No.: C295861-01

City: St. Louis

County: St. Louis

State: Missouri

Total Project Amount: \$15,600,000

Total Clean Water State Revolving Fund Eligible Costs: \$5,037,465

- Potential Loan: \$5,037,465

COMMUNITY DESCRIPTION:

Location: The project is located at 7605 St. Charles Rock Road, St. Louis, MO 63133 and is currently known as the Normandie Golf Course. The golf course is south of Interstate 70 and east of Interstate 170.

Population, Present and Projected, and Design Year: The annual rounds played at the golf course in 2022 was 24,800 and the foundation projects 30,000 per year when the renovation is complete. Hundreds of young people are expected to be directly served once the project opens in 2025, along with thousands more from the many youth golf programming groups in the St. Louis metropolitan region that will utilize the new facility on a regular basis.

Current Methods of Waste Treatment: This is a stormwater project where the drainage from the golf course enters a tributary to River des Peres, a water of the U.S. During low flow conditions/dry weather, the flow in the upper portion of the River des Peres is intercepted into a tunnel connected to the MSD Lemay Wastewater Treatment Plant (WWTP) for treatment and the effluent is then discharged into the Mississippi River. During certain high flow conditions/wet weather events, the flow from River des Peres has the ability to discharge through multiple combined sewer overflow outfalls.



PROJECT DESCRIPTION:

Purpose and Need: The Normandie Golf Course watershed is located in the Schoenberger Creek-Mississippi River watershed (HUC 071401010403), in the headwaters of a tributary to the River des Peres. The purpose of the project is to provide irrigation water to the golf course via a series of in-channel wet detention basins. Stormwater collected from an upstream residential area is conveyed to the site via a 48-inch diameter concrete pipe and through the site via a tributary to River des Peres. This project, through the use of wet detention basins and best management practices (BMPs), aims to decrease the amount of potable water used for irrigation as well as reduce the volume and lower the flow peaks downstream in hopes of decreasing the frequency of combined sewer overflows (CSOs).

Description of Project: The existing conveyance system and tributary to River des Peres will be altered by creating a series of in-channel wet detention basins that will be connected by links of decorative channels and pipes through the length of the golf course. Near the downstream end of the system, the tributary to River des Peres will discharge via a drop structure to the Lake Charles Park southwest storage reservoir and put back-pressure on the deep reservoir that will feed the proposed irrigation system.

Design Factors: The total combined watershed area, for the upstream residential area and golf course, is 326 acres, with the volume from annual rainfall of 44,222,911 cubic feet. The irrigation area will be 110 acres. Currently the estimated storage volume is 1,064,264 cubic feet, although this is subject to increase. The estimated volume expected to be used for regular irrigation per year is 13,459,345 cubic feet, with 30,763,566 cubic feet available for extra irrigation. The current estimate of makeup¹ water is 1,200,670 cubic feet (subject to decrease). It is assumed that there will be no attenuation of runoff.

Receiving Stream: The flow of stormwater is currently received by a tributary to the River des Peres, which flows into the Mississippi River. Following the implementation of the project, the flow will be diverted and used as irrigation on the golf course, reducing the volume going to MSD Lemay Wastewater Treatment Plant WWTP to be treated.

ALTERNATIVES CONSIDERED:

Selected – Alternative No. 1 proposes the implementation of wet detention basins. A series of wet detention basins will receive stormwater runoff from the watershed. The runoff will be stored and used for irrigating approximately 110-acres of green space in and along the golf course's fairways. All underdrains from new greens and bunkers will also be routed to the wet detention basins rather than being conveyed downstream to the public system. Removal of flow from this watershed will have an effect on the downstream system by potentially reducing flood volumes and duration. The capital cost of Alternative No. 1 will be \$3,981,300 with a present worth of \$4,914,600.

Not Selected – Alternative No. 2 is bioretention basins and storage lakes. One alternative evaluated is implementing off-line bioretention basins (BRBs) to promote infiltration of stormwater runoff into subgrade as well as on-line storage reservoirs to supply irrigation water.

¹ Water needed to replenish or make up for losses in a stormwater system.

The BRBs were not proposed due to the preference for storage rather than infiltration. The estimated project cost of Alternative No. 2 was \$7,000,000.

REASONS FOR SELECTION OF PROPOSED ALTERNATIVE:

The implementation of wet detention basins was selected due to the need for irrigation water storage which will lessen the use of potable water while also reducing water volume and flow peaks downstream, therefore potentially lessening CSOs and flood events. Alternative No. 1 was determined to be the most cost effective, practical, and feasible.

ENVIRONMENTAL IMPACT SUMMARY:

1. Primary:

- a. Construction: Blowing dust, temporary surface disruption, and noise from construction equipment will occur during construction, but these impacts are expected to be minor and temporary in nature. In addition, the development team will be applying for a land disturbance permit from the state that will have an accompanying stormwater pollution prevention plan outlining stormwater BMPs expected to be in place during construction as well as any required local permits such as from St. Louis County and Metropolitan St. Louis Sewer District.
- b. Environmental: By using the wet detention basins for irrigation, it is expected that not only will the area maintain a lush and green appearance throughout, but the local water table may be replenished through constant irrigation 8-months of the year. The proposed project will require low maintenance and drought-resistant plants be installed in all out-of-boundary areas of the golf course to promote wildlife and the local ecosystem.
- c. Financial: The foundation intends to utilize future revenues generated from the golf course to repay the Clean Water State Revolving Fund loan. This includes green fees with the Golf Shop revenue. The annual rounds played at the golf course in 2022 was 24,800 and the foundation projects 30,000 per year when the renovation is complete. The operation and maintenance costs for 20 years are estimated to be \$500,000.

2. Secondary:

- a. Population Impacts: No significant change in population trends is expected to result in this project. No significant relocation of people or structures shall result from this project. This project will not serve any new areas.
 - b. Land Use and Trends: No significant change in land use trends is expected to result from this project. No development of sensitive areas is anticipated.
 - c. Environmental: Environmental impacts caused by this project either have specific mitigation measures (see Section 3) or are not expected to be significant.
3. Mitigation Measures Necessary to Eliminate Adverse Environmental Effects: Best management practices and good engineering practices should minimize noise, blowing dust,

and erosion normally associated with construction. Metropolitan Golf Foundation will promptly restore disturbed areas.

- a. U.S. Army Corps of Engineers (USACE): Metropolitan Golf Foundation will be required to comply with the terms and conditions of the USACE Clean Water Act Section 404 permit as well as Missouri Department of Natural Resources Section 401 Water Quality Certification, for the construction within a tributary to the River Des Peres, Section 27, Township 46 N, Range 6 E, St. Louis County, Missouri.
- b. U.S. Fish and Wildlife Service (USFWS): The USFWS concurred with the USACE's determination that the proposed work is not likely to adversely affect federally listed species or jeopardize the continued existence of the Tricolored Bat.
- c. Missouri Department of Conservation (MDC):

- i. Natural Heritage records identifies a bald eagle nest 1.8 miles from the project site. Bald Eagles (*Haliaeetus leucocephalus*) nest near streams or water bodies in the project area. Nests are large and fairly easy to identify. While no longer listed as endangered, eagles continue to be protected by the federal government under the Bald and Golden Eagle Protection Act.

To avoid the incidental take of bald eagles, the following is recommended:

- A buffer of at least 660 feet between project activities and the nests (including active and inactive nests).
 - If project activities are within 660 feet of the nest, please restrict activities to outside the nesting season. The nesting season in Missouri is January 1-July 15.
 - If these recommendations cannot be implemented, incidental take of bald eagles may occur and a permit from USFWS may be necessary.
 - Do not clear nests or nest trees.
 - Loud, intermittent noises may cause the incidental take of bald eagles. To avoid the incidental take of eagles or their young, USFWS recommends that you avoid blasting or other activities that produce extremely loud noises within $\frac{1}{2}$ mile of active nests (or within 1 mile in open areas), unless greater tolerance to the activity (or similar activity) has been demonstrated by the eagles in the nesting area.
- ii. St. Louis County has known karst geologic features (e.g., caves, springs, and sinkholes, all characterized by subterranean water movement). Few karst features are recorded in Natural Heritage records, and ones not noted here may be encountered at the project site or affected by the project. Cave fauna (many of which are species of conservation concern) are influenced by changes to water quality, so check your project site for any karst features and make every effort to protect groundwater in the project area.
 - iii. The peregrine falcons were introduced to downtown buildings in the St. Louis and Kansas City areas in the 1990s, and populations of this state endangered-list species have been increasing since. They nest April 15-July 15 on natural bluffs, building

ledges, and bridges. Work should be avoided within 1,500 feet of nests when nest building or active nests (eggs or hatchlings) are present. Follow best management recommendations at <https://mdc.mo.gov/sites/default/files/2020-06/PeregrineFalconBMP.pdf>.

- iv. Construction: The project should be managed to minimize erosion and sedimentation/runoff to nearby streams and lakes, including adherence to any Clean Water Act permit conditions. Revegetate areas in which the natural cover is disturbed to minimize erosion using native plant species compatible with the local landscape and wildlife needs. Annual ryegrass may be combined with native perennials for quicker green-up. Avoid aggressive exotic perennials such as crown vetch and sericea lespedeza. Pollutants, including sediment, can have significant impacts far downstream. Use silt fences and/or vegetative filter strips to buffer streams and drainages and monitor those after rain events and until a well-rooted ground cover is reestablished. Please see [Best Management Practices for Construction and Development Projects Affecting Missouri Rivers and Streams \(mo.gov\)](#).
- v. Though Indiana and northern long-eared bats are not known to occur in the project area, these species should be assumed present wherever habitat exists because they occur in St. Louis County and could occur in the project area. Indiana and northern long-eared bats hibernate during winter months in caves and mines. During the summer months, they roost and raise young under the bark of trees in riparian forests and upland forests near perennial streams. During project activities, avoid degrading stream quality and where possible leave snags standing and preserve mature forest canopy. Do not enter caves known to harbor Indiana and/or northern long-eared bats, especially from September to April.
- vi. Gray bats occur in St. Louis County and could occur in the project area, as they forage over streams, rivers, and reservoirs. Avoid entry or disturbance of any cave inhabited by gray bats and when possible, retain forest vegetation along the stream and from the gray bat cave opening to the stream.
- vii. Tri-colored bats are known to occur in St. Louis County. In Missouri, most tri-colored bats hibernate in winter in the most humid and warm parts of caves. In summer, they roost in trees, in crannies about cliffs or buildings, in barns, or sometimes in high domes of caves. Tri-colored bats have been significantly impacted by white-nose syndrome.
- viii. Invasive exotic species are a significant issue for fish, wildlife, and agriculture in Missouri. Seeds, eggs, larvae, and aquatic plant material may be moved to new sites on boats or construction equipment, so inspect and clean equipment thoroughly before moving between project sites.
 - Remove any mud, soil, trash, plants (or plant material), or animals from equipment before leaving any water body or work area.
 - Drain water from boats and machinery that has operated in water, checking motor cavities, live-well, bilge and transom wells, tracks, buckets, and any other water reservoirs.

- When possible, wash and rinse equipment thoroughly with hard spray or hot water ($\geq 140^{\circ}$ F, typically available at do-it-yourself carwash sites), and dry in the hot sun before using again.
- d. **U.S. Army Corps of Engineers:** The project will adhere to the following requirements:
 - i. §404 Nationwide Permit #42;
 - ii. Missouri Department of Natural Resources issued Clean Water Act § 401 Water Quality Certification; and
 - iii. USFWS recommendation for the removal of trees, which is only being allowed during the winter months from November 1st to March 31st.
- 4. **Irreversible and Irrecoverable Commitment of Resources:** Fuel and construction materials will be irretrievably committed to this project. Future funds will be committed to the operation and maintenance of the system.

PUBLIC PARTICIPATION:

1. **Public Involvement:** The Metropolitan Golf Foundation held a public meeting on December 19, 2023, at the Florissant Valley Branch of the St. Louis County Library, in the City of Florissant, Missouri.
2. **Public Opposition or Opinions:** The public expressed no adverse opinions to the project.

COORDINATION AND DOCUMENTATION WITH OTHER AGENCIES AND SPECIAL INTEREST GROUPS:

1. **Facility Plan Dated:** Stormwater Basin Plan, September 18, 2023
 Prepared By: James Holtzman, Clean Energy Design Group, Inc.
 Dave Dobkowski, P.E., Weihe Engineers
Environmental Assessment: November 20, 2023
 Prepared By: James Holtzman, Clean Energy Design Group, Inc.
 Dave Dobkowski, P.E., Weihe Engineers
2. **Federal:**
 - a. USFWS
 - b. USACE
3. **State:**
 - a. Missouri DNR – State Historic Preservation Office
 - b. Missouri DNR – Missouri Geological Survey
 - c. Missouri DNR – Division of State Parks
 - d. Missouri Department of Conservation
 - e. Missouri Office of Administration – Federal Assistance Clearinghouse
4. **Consulting Engineer:** Clean Energy Design Group, Inc.
 P.O. Box 559
 Metamora, IL 61548

Weihe Engineers
14528 South Outer Road, Ste 444
Chesterfield, MO 63017

5. In accordance with the National Historic Preservation Act Section 106, notice was given to all tribes that may attach a religious or cultural significance to historic properties in the region that may be affected by this undertaking.

Positive Environmental Effects to be Realized from the Proposed Project: The wet detention basins will maintain the area's lush and green appearance through constant irrigation. The local water table will benefit from irrigation water infiltration eight months of the year. The proposed project will require low maintenance and drought-resistant plants be installed in all out-of-boundary areas of the golf course to promote the local ecosystem and wildlife.

Reasons for Concluding There Will Be No Significant Impacts: The proposed project will have a net positive impact on water quality and will not result in any significant adverse impacts on rare or endangered species, floodplains, wetlands, recreational areas, cultural/archaeological sites, or air quality. Population densities and land use trends will not be significantly affected. Appropriate mitigation measures will be implemented for any impacts.

This action is taken based on a careful review of the facility plan and supporting documentation on file in the office of the Department of Natural Resources' Financial Assistance Center at 1101 Riverside Drive, Jefferson City, MO 65101. These are available for public review upon request Monday-Friday, 8:00 a.m. to 5:00 p.m. This agency will not take any administrative action on this project for at least 30 calendar days from the date of this document. Persons wishing to comment on the above environmental decision may submit comments to Angie Garcia, E.I. of the Missouri Department of Natural Resources, Financial Assistance Center, P.O. Box 176, Jefferson City, MO 65102-0176, during this period. E-mail comments will be accepted at the following address: DNR.SRFPublicNotice@dnr.mo.gov. Please include the project name and number in all comment letters. Thank you.

Sincerely,

FINANCIAL ASSISTANCE CENTER

Lauren Graessle
Lauren Graessle, P.E.

Director

LG:agc

Angie Garcia
Angie Garcia, E.I.

Technical Reviewer

May 2, 2024
Date

Attachments

DISTRIBUTION

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Missouri Department of Natural Resources
Missouri Geological Survey
Environmental Geology Section
P.O. Box 250
Rolla, MO 65402-0250

Missouri Department of Natural Resources
Division of State Parks
State Historic Preservation Office
P.O. Box 176
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Columbia, MO 65203-0057

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SRF File: C295932-01

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Environmental Protection Agency
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722 Jackson Place, N.W.
Washington, DC 20503

St. Louis District
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St. Louis, MO 63103

East-West Gateway Council of Governments
1 Memorial Drive, Suite 1600
St. Louis, MO 63102

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c/o David Brown
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Absentee-Shawnee Tribe of Indians of Oklahoma
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Apache Tribe of Oklahoma
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Iowa Tribe of Oklahoma
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Kaw Indian Nation of Oklahoma
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Kickapoo Tribe in Kansas
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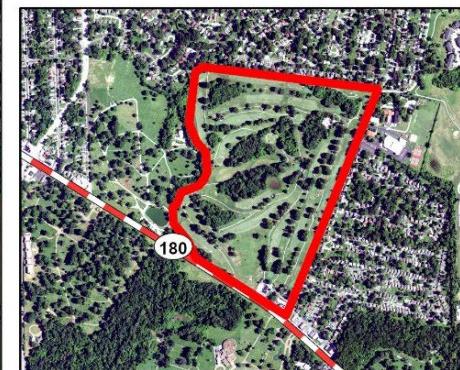
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Normandie Golf Course



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